Work Order I une-12-13 9:26:15			*103	8062*							Page 1	
Revision ID: tem Name: Brac		* 4 *	Accept	*N900		100)*		Start Stop		S1* S2*	
Start Date: 6/11 Required Date: 6/11 Reference:	~ 0	*4* *4*		Cust Item I Customer:	D:							
Approvals: Pro	ocess Plan:	Date:	Tooling: SPC (Y/N):		ate:]		Start	*N *N	R1* R2*	
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rejec Qty		Reject Number	Insp. Stamp	
Draw Nbr	Revision Nbr											
D2012-111	Rev A											
*100 *100* Waterjet	FLOW WATER JET Memo		0.00				_5	0	<u>.</u>		JM13-09-3	><
FLOW CNC Waterjet	Dwg Rev: Prog Rev:											
*11 0	QC2- Inspect parts off	machine FAI/FAIB	0.00				5	D			Jm13-09.	<i>ب</i> ر.
QC Quality Control	Memo		0.00								<u> </u>	
120	QC8- Inspect parts - se	econd check	0.00 27 9-89				9					
120 ^{QC}	Memo		0.00 13.9	36								

Quality Control

DQA:		Date:			. WORK ORDER NON	~	ONICO	DAAANCE / UDDATE				,	~DART
QA Closed:		Date:	:		WORK ORDER NON-	-C(JINFO	RIVIANCE / UPDATE	W	ork Order up	odate only	\neg	AEROSPACE
Work Orde	ar:				DISPOSITION			AGAIN	IST DE	PARTMENT	/PROCESS		
WOIK OIGE					Rework	1		Skid-tube Crosstu	ho	1	Water Jet	\neg	Engineering
Part N	No.				Scrap		1	Machining Small F		Pro	d. Eng. Coor.	-	Quality
					Use-as-is			noforming Finish	_	4	re/Packaging		Other
NCR N	No			_	Suspected Unapproved			Large Fab Compos	~ —]	Supplier		
Root		<u> </u>	1 · 1	Desc	ription of work order update		Initial	Action		Sign &		<u> </u>	
Cause	Date	Step	Qty	0000	or non-conformance	1	nief Eng			Date	Verification	,	QC Inspector
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Offset/Setup													
Process												ŀ	
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	Bendin	g			Bend	L	Folio/F	Program		Outside Dim	ensions		Pressure/Forced
	Centre	Not Conce	ntric		BOM/Route		Grain			Over/Under	tolerance		Set-up
	Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	ct [Temperature/Cure
· "	Crimp/	Kink/Ripple	e/Wave		Burrs		Inspect	ion Incomplete/Unqualified		Part Lost/Mi	ssing		Weld
	Cuffs				Contamination		Instruct	ions Incomplete/Unclear		Part Moved			Wrong Stock Pulled
	Crushir	ng			Countersink		Misalig	ned/off center		Positioned V	vrong _		
	Heat T	reat			Cut Too Short		Mislabe	eled		Power Loss/	Surge		Other
	Inspect	ion Strip in	1 Tube		Drawing		Misread	t					
	Marks/	Chatter			Drill Holes		Off-set						
	Turnin	g Sequence	:		Finish		Out of (Calibration					
	Wave/	Twist in Tul	he		Fit/Function	1	Out of	Saguence					

H:/FORMS/Quality Assurance\approved QA/NCRWO RevH

Work Ord June-12-13 9:2		3062		*103	3062*							Page 2
Item ID:	D2012-111			Accept	*N900	040	100)*	Setup	Start	*N.	S1*
Revision ID:								-		Stop		
Item Name:	Bracket									этор	^ N.	S2*
Start Date:	6/11/13	Start Qty: 4.00	*4*		Cust Item I	D:						
Required Date	e: 6/11/13	Req'd Qty: 4.00	*4*		Customer:							
Reference:			_									
Approvals:	Process Pl	an:	Date:	Tooling:	Da	ate:		j	Run	Start	171	R1*
				SPC (Y/N):	Da	ate:			:	Stop	*N	R2*
Sequence ID/ Work Center	ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rej Qty	-	Reject Number	Insp. Stamp
130		Small Fab		0.00	\	. \$1						
Small Fab Small Fab		Memo Deburr if n	ecessary.	0.00	b _i	A 8						
140		QC5- Inspect part comp	oleteness to step on W/O	0.00								
140												
QC		Memo		0.00								
Ouality Control				\								

150

Identify as per dwg & Stock Location: 5703

150 Packaging

Memo

Packaging

0.00



DQA:			Date:			_							™ ⊃∧DT
OA Classide			Data			WORK ORDER NON-	-C(ONFO	RMANCE / UF				AEROSPACE
QA Closed:			Date:		-						ork Order up	date only	
Work Ord	er:					DISPOSITION				AGAINST DE	EPARTMENT,	/PROCESS	
	-					Rework			Skid-tube	Crosstube	7	Water Jet	Engineering
Part I	No.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	-					Use-as-is			noforming	Finishing	-1	re/Packaging	Other
NCR I	No.					Suspected Unapproved			Large Fab	Composite	1 ′	Supplier	
							1		• 🗀	· L.	_		
Root					Desc	ription of work order update	1	Initial	Acti	on	Sign &		
Cause		Date	Step	Qty		or non-conformance	Ch	nief Eng	Descri	ption	Date	Verification	QC Inspector
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Equip/Tooling													
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	-	Bending				Bend		Folio/P	rogram	<u> </u>	Outside Dim	ensions	Pressure/Forced
	Ш	Centre No	ot Concer	ntric		BOM/Route		Grain			Over/Under	tolerance	Set-up
. 37	ш	Cracks				Broken/Damage/Defect		Hardwa	re		Part Incorred	ct	Temperature/Cure
	Ш	Crimp/Kir	nk/Ripple,	/Wave	<u> </u>	Burrs		Inspecti	on Incomplete/Un	qualified	Part Lost/Mi	ssing	Weld
€स े	-	Cuffs				Contamination		1	ions Incomplete/U	nclear	Part Moved		Wrong Stock Pulled
	-	Crushing			ļ	Countersink		Misalig	ned/off center	<u> </u>	Positioned V	Vrong	
		Heat Trea			ļ	Cut Too Short		Mislabe	led	<u>L.</u>	Power Loss/	Surge	Other
	\vdash	Inspectio		Tube	ļ	Drawing		Misread	l				
	-	Marks/Ch				Drill Holes	<u> </u>	Off-set					
	-	Turning S	•		<u> </u>	Finish		4	Calibration				
		Wave/Tw	ist in Tub	e		Fit/Function		Out of S	equence				

Work Orde June-12-13 9:20		3062		*103	3062*							Page 3
Item ID: Revision ID: Item Name:	D2012-111 Bracket			Accept	*N900	040	100)*	-	tart top		S1* S2*
Start Date: Required Date: Reference:	6/11/13 6/11/13	Start Qty: 4.00 Req'd Qty: 4.00	*4* *4*		Cust Item I Customer:	D:						
Approvals:	Process Pla	an:	Date:	Tooling: SPC (Y/N):		ate:				tart Stop		R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accep Qty	t Reject Qty		Reject Number	Insp. Stamp

0.00

0.00

QC21- Final Inspection - Work Order Release

Memo

160

160

Quality Control

A / Bm 13/09/29

DQA:			. Date:										
QA Closed:			Date:			WORK ORDER NON	-C(ONFO	RMANCE / UPI		ork Order up	ndate only	AEROSPACE
			Duter					<u>, </u>			<u> </u>	·····	
Work Orde	er:					DISPOSITION				AGAINST DE	PARTMENT	PROCESS	
	_					Rework			Skid-tube	Crosstube]	Water Jet	Engineering
Part N	۷o					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
					-	Use-as-is]	Therr	noforming	Finishing	Rec/Stor	e/Packaging	Other
NCR I	No					Suspected Unapproved			Large Fab	Composite]	Supplier	
Root			<u> </u>		Desci	ription of work order update	1	Initial	Actio	<u>.</u> n	Sign &		1
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Transport													
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	\vdash	Bending			<u> </u>	Bend		Folio/F	rogram	ļ	Outside Dim	ensions	Pressure/Forced
	-	Centre No	ot Concer	ntric	·	BOM/Route		Grain			Over/Under	tolerance	Set-up
	${m oldsymbol o}$	Cracks				Broken/Damage/Defect		Hardwa	ire		Part Incorred	t	Temperature/Cure
	-	Crimp/Kir	nk/Ripple	/Wave		Burrs	L	Inspect	ion Incomplete/Unqu	ualified	Part Lost/Mi	ssing	Weld
		Cuffs				Contamination		1	ions Incomplete/Und	clear	Part Moved		Wrong Stock Pulled
	$\overline{}$	Crushing				Countersink	<u> </u>	1 "	ned/off center	<u></u>	Positioned V		7
	$\boldsymbol{\vdash}$	Heat Trea			L.	Cut Too Short	<u></u>	Mislabe			Power Loss/	Surge	Other
		Inspection	· .	Tube	<u> </u>	Drawing	L	Misread	d				
	-	Marks/Ch			ļ	Drill Holes		Off-set					
	-	Turning S			<u> </u>	Finish		1	Calibration				
	1 1	Wave/Tw	ist in Tub	e e	ı	Fit/Function	1	Out of	Sequence				

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Work Order ID:

103062

Parent Item:

Comments:

D2012-111

Parent Item Name:

Bracket

IPP: C00.05.02Now laser cutEC

IPP D 07 01 24 wateriet

EC

Start Date: 6/11/13

Required Date: 6/11/13

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304S16GA 304/316 Sheet .063		Purchased	No			100	sf	280.7102	0.0215	<i>0.0905264</i> ○.∂≤	-		Jm13-09
				Location		Loc Oty	<u>Lo</u>	c Code					
				MAT020		280.7101686							
				122	2245	0.1713688							
				123	3136	140.8				<u></u>			
				124	1428	23.61							
				124	1572	7.0181688							
		•		125	5599	109.110631							
				(20	6915				126	915			

DQA:			Date:							•			****	AART
						WORK ORDER NON-	-CC	ONFO	RMANCE / UP					AEROSPACE
QA Closed:			Date:							W	ork Order up	date only		
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
·						Rework			Skid-tube	Crosstube	7	Water Jet		ngineering
Part N	No.					Scrap		ļ	Machining	Small Fab	Pro	d. Eng. Coor.	-	Quality
	-					Use-as-is			noforming	Finishing	⊣ `	re/Packaging	_	Other
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Supplier	Ш													•
Training	Щ													
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Unapproved	Ll										<u>. </u>			
		<u> </u>					FA	ULI CA	regory					
Landi					Γ	General	_	11:- /5		Γ		: Г		/Fd
·	\vdash	Bending	at Camaan			Bend BOM/Route	_	1	rogram	-	Outside Dim Over/Under	F-		ssure/Forced
	Н	Centre No Cracks	or concer	itric		Broken/Damage/Defect	_	Grain Hardwa		 	Part Incorred		_	-up nperature/Cure
	Н		ak/Binnlo	Mayo	-		-	4		auglified	┥	<u>-</u>		•
	-	Crimp/Kir Cuffs	iv\vihbie	, wave	-	Burrs Contamination	<u> </u>	1	ion Incomplete/Unditions Incomplete/Un	<u> </u>	Part Lost/Mi Part Moved	22111R	- We	ong Stock Pulled
	⊢⊣	Crushing			-	Countersink	-	4	ned/off center	Ticlear	Positioned V	L Vrong		ong stock runed
	-	Heat Trea	at			Cut Too Short		Mislabe		F	Power Loss/	_	Oth	ner
		Inspection		Tube	-	Drawing	 	Misread			7. Ower 1033/	Zuige [Jou	
	-	Marks/Ch		TODE		Drill Holes	\vdash	Off-set	4					
	\vdash	Turning S			-	Finish	\vdash	1	Calibration					
	\vdash	Wave/Tw				Fit/Function	\vdash	4	Sequence					
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DART AEROSPACE LTD	Work Order:	10306-
Description: Bracket	Part Number:	D2012-111
Inspection Dwg: D2012-111 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

Γ	_				T.	
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.257	+0.006/-0.001	0.358"	-		8	Jamoi
3.18	+/-0.030	3.1862	1		V	
0.75	+/-0.030	0.754"	}		V	
0.38	+/-0.030	0.378'	1		V	
0.40	+/-0.030	0.406	١		٧	
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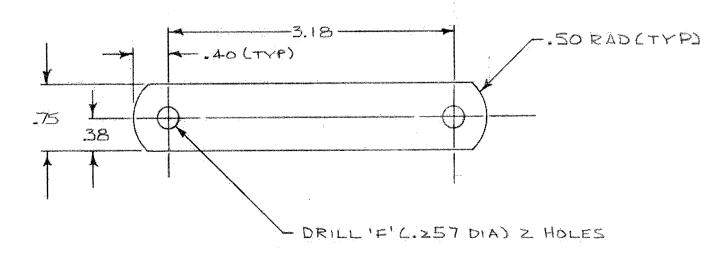
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Measured by:	Jm	Audited by:	27 9-89	Prototype Approval:	N/A
Date:	13-09-25	Date:	13926	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	07.02.09	New Issue	KJ/JLM ,	
В	08.07.03	Inspection Dwg and Rev correction	KJ/DD	<u>A</u>

DQA: Date:			–										
QA Closed: Date:				WORK ORDER NON-CONFORMANCE / UPDATE Work Order update only									
QA Closed: Date.						-			V	rork Order up	date only		
Work Orde	er:				DISPOSITION				AGAINST D	EPARTMENT,	/PROCESS		
					Rework		Skid-tube	Crosstube	Water Jet			Engineering	
Part N	lo				Scrap			Machining	Small Fab	Prod. Eng. Coor.			Quality
					Use-as-is		Thern	noforming	Finishing	Rec/Sto	re/Packaging		Other
NCR N	lo				Suspected Unapproved			Large Fab	Composite				
Root				Desci	ription of work order update		nitial	Acti	ion	Sign &		T	
Cause	Date	Step	Qty		or non-conformance	Chief Eng		Descri	Description		Verificatio	n	QC Inspector
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Doc/Data													
Equip/Tooling													,
Handling/Pre													
Material										-			
Operator					,								
Offset/Setup													
Process													
Supplier]	
Training	_		1 1										
Transport												1	
Unapproved		1				<u> </u>		<u> </u>					·
						FAL	JLT CAT	regory					
Landir	ng Gear				General		l- 1: /5			7	. 1		
Bending Centre Not Concentric		<u> </u>	Bend	\vdash	i .	rogram	<u> </u>	Outside Dim			Pressure/Forced		
	_	ot Concer	TUTIC	-	BOM/Route	H	Grain		-	⊣	Over/Under tolerance		Set-up
	Cracks	nk/Binnlo	MALONO		Broken/Damage/Defect	_	Hardwa			Part Incorred		-	Temperature/Cure
	Crimp/Kink/Ripple/Wave		\vdash	Burrs Contamination		(ion Incomplete/Un	· -	Part Lost/Missing		\dashv	Weld	
	Crushing			-	Countersink	\vdash	Instructions Incomplete/Unclear			Part Moved	Vrong	\ر	Wrong Stock Pulled
Heat Treat		-	Cut Too Short	-	Misaligned/off center Mislabeled			Positioned Wrong Power Loss/Surge			Other		
			Drawing	\vdash	Misread		L	Trower rossy	onike	10	Julei .		
	Marks/Cl	· .	·ubc		Drill Holes	\vdash	Off-set	4					
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	Turning Sequence Wave/Twist in Tube				Fit/Function	\vdash	i	Sequence					
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WD 103062



NOTES: 1, MAT'L AIST 304/316 CRES

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1	A 344		REVISION		ANVET CODE SHALL BE PER HAS 523		PART NO.	MEM	DES	CRIPTION	MATERIAL	SPEC,/VEN	NOOR	
			DRAWN	THE CHANNE IS PRIVATE AND COMPONITION AN IT IS NOT TO BE USED FOR ANY PARPOSE OF CON- WITHOUT THE PERMISSION OF CHAT ARRO.	BASIC COOK HOHEAD MEAN SIDE		CONTINCT NO.		DART DART AERO ACCESSORIES INC					
			APPROVED		`	1-HEAD FAR SIDE		Okayan Quit ;		VANCOUVER		CAN	NADA	
	7	øK.	***************************************	REQUIREMENTS — UNLES	SS OTHERWISE SPECIFIED	D-DWALE DIGIT-NO OF SHEETS	LENGTH GASH NO.	HATTON	7 0	6/03/94	»·			I
	REEVEN FROM	¥ .	DESCRIPTION	GLIERAL J. DINENDENDE ALL SERVICES S. SURICE ROLLICHIES ST. S. ROLLICHIES ST. 171 S. ROLLICHIES ST. 171 S. ROLLICHIES ST. 171 S. MOLES PER AUG 10287	1 - TOLERANCES J.CX E. 0300 REX. E. 0310 7 ANGLES E. M° 3 PARALLELISM E. 0025 4 ECCHMINGTY 005 MAX 5 YEARM TRY ABOUT	C-COUNTENSINK		BRADLE	. 9	10/3/31				
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					MI MIT CENTRE LINES .005			BANDER	90	1/5/5	COOL.	DZO!	2-111	Ä
				REPORT	ALL DISCREPANCIES - DO NO			CIENT · /				SCAL	SHI / OF /	

DQA:	A: Date:													
					WORK ORDER NON-CONFORMANCE / UPDATE									
QA Closed:	1	` Date:			Work Order update only									
Work Orde	er:				DISPOSITION			AGAI						
					Rework			Skid-tube Crosst	ube]	Water Jet	Engineering		
Part N	No.				Scrap			—				Quality		
	·				Use-as-is			noforming Finish	ning	4	d. Eng. Coor. re/Packaging	Other		
NCR N	No				Suspected Unapproved		Large Fab Composite]	Supplier] []		
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Cause	Date	1 1 1			or non-conformance	Chief Eng		Description		Date	Verification	QC Inspector		
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	Bending				Bend			Folio/Program			Outside Dimensions Pressure/For			
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	Cracks				Broken/Damage/Defect	_	Hardwa	⊢		Part Incorrect		Temperature/Cure		
	Crimp/Kink/Ripple/Wave			Burrs	L	1	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld			
	Cuffs				Contamination	L	1	ions Incomplete/Unclear	. —			Wrong Stock Pulled		
	Crushing				Countersink	_	-	ned/off center			Vrong	¬·		
	Heat Treat				Cut Too Short	_	Mislabe	<u></u>		Power Loss/	Surge	Other		
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		Sequence			Finish		4	Calibration						
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